ABSTRACT OF THE DISCLOSURE

The invention relates to methods for directing integration of a nucleic acid of interest towards homologous recombination and uses thereof. The present invention discloses factors involved in integration of a nucleic acid by illegitimate recombination which provides a method of directing integration of a nucleic acid of interest to a predetermined site, whereby the nucleic acid has a homology at or around the predetermined site, in a eukaryote with a preference for non-homologous recombination comprising steering an integration pathway towards homologous recombination. Furthermore, the invention provides a method of directing integration of a nucleic acid of interest to a subtelomeric and/or telomeric region in a eukaryote with a preference for non-homologous recombination.

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